

FIFTH REPORT OF COMMITTEE ON FLORAL AREAS.
PRELIMINARY LISTS OF NEW ENGLAND
PLANTS—XXX.

THE sign + indicates that an herbarium specimen has been seen; the sign — that a reliable printed record has been found. An asterisk following either sign signifies that the species concerned, though native elsewhere in New England, is certainly known in the state specified only as an escape from cultivation.

TAXACEAE

	Me.	N. H.	Vt.	Mass.	R. I.	Ct.
<i>Taxus canadensis</i> L.	+	+	+	+	+	+

PINACEAE

<i>Abies balsamea</i> (L.) Mill.	+	+	+	+	+*	+
“ “ var. <i>phanerolepis</i> Fernald	+	+	+			
<i>Chamaecyparis thyoides</i> (L.) BSP.	+	+		+	+	+
<i>Juniperus communis</i> L.	+	+		+		+
“ “ var. <i>depressa</i> Pursh	+	+	+	+	+	+
“ <i>horizontalis</i> Moench	+	+	+	+		
“ <i>virginiana</i> L.	+	+	+	+	+	+
<i>Larix decidua</i> Mill.				+	—	+
“ <i>laricina</i> (Du Roi) Koch	+	+	+	+	+*	+
<i>Picea Abies</i> (L.) Karst.	+		+	+		+
“ <i>canadensis</i> (Mill.) BSP.	+	+	+	—	—*	—*
“ <i>mariana</i> (Mill.) BSP.	+	+	+	+	+	+
“ “ f. <i>semiprostrata</i> (Peck) Blake			—			
“ <i>rubra</i> (Du Roi) Dietr.	+	+	+	+	+	+
“ “ f. <i>virgata</i> Rehder				—		
<i>Pinus Banksiana</i> Lamb.	+	+	—	+*		
“ <i>resinosa</i> Ait.	+	+	+	+		+
“ <i>rigida</i> Mill.	+	+	+	+	+	+
“ <i>Strobus</i> L.	+	+	+	+	+	+
“ <i>sylvestris</i> L.	+			+	+	+
<i>Thuja occidentalis</i> L.	+	+	+	+	+*	+
<i>Tsuga canadensis</i> (L.) Carr.	+	+	+	+	+	+

Picea mariana, f. *semiprostrata* is an extreme “creeping alpine form . . . eight or ten decimeters long or more, with short crowded branches mostly fascicled toward the erect apex of the stem, and tiny four-

grooved glaucous needles 3–6 mm. long.” It is to be expected on other high mountains beside Mt. Mansfield, from which it has been reported by Eggleston (Vt. Agric. Exp. Sta. Bull. 187. 162 (1915)) and Blake (RHODORA, xv. 200 (Nov., 1913)).

Picea rubra, f. *virgata* has the long and slender branches quite destitute of branchlets, paralleling in this respect a form of the Norway spruce (“snake spruce”) long known in Europe. It is apparently known only from the original collection near Williamstown, Mass. (*George Walker*).

The European larch (*Larix decidua*) is reported as an escape from cultivation at eight localities in southeastern Massachusetts, Rhode Island, and in Connecticut. About the middle of the last century the Norway spruce (*Picea Abies*) was very popular for ornamental planting, and many cultivated trees survive in most parts of New England. It is reported as escaped in Maine, Vermont, Massachusetts, and Connecticut. The Scotch pine (*Pinus sylvestris*) has been much used in experiments in forestry and to some extent for ornament; it has spread from seed and become more or less well established at some 15 stations in Maine, Massachusetts, Rhode Island, and Connecticut.

In addition to these foreigners, certain coniferous trees native in northern New England have been planted and have occasionally established themselves in the southern portions of our area. *Abies balsamea* is found as an escape on Cape Cod (where at one time it was much planted), in Rhode Island, and in Connecticut. It is native in the northwestern corner of Connecticut and in the highlands of western and north central Massachusetts. *Picea canadensis* is reported as reproducing abundantly among birches in a sandy area adjoining a cemetery in Griswold, Conn. (*G. E. Nichols*, RHODORA, xxiv. 112 (June, 1922)), at Little Compton, R. I. (*J. F. Collins*), and as occurring at Brookline, Mass. *Pinus Banksiana* has been introduced and produced seedlings at Nantucket (*Bicknell*, RHODORA, xviii. 242 (Dec., 1916)). *P. resinosa* occurs spontaneously about Woods Hole, Mass., as a result of forest planting. At about the time when *Picea Abies* was most in vogue, *Thuja occidentalis* was also fashionable, especially for hedges; it has escaped at a number of stations in southeastern Massachusetts, Rhode Island, and Connecticut. Perhaps the reported station in central Massachusetts (*Jackson*, Cat. Pl. Worcester Co., Mass., 3rd Ed. 10 (1909)) also originated

from planted trees. The species is apparently native in the towns of Canaan and Salisbury in northwestern Connecticut, but is not so reported from Berkshire Co., Mass., immediately north, where one would expect it (Hoffman, Proc. Boston Soc. Nat. Hist. xxxvi. 204 (1922)).

Geographically (excluding the above-mentioned extensions of natural ranges through cultivation) the species here considered may be grouped as follows, in accordance with the plan of our fourth report (RHODORA, xxvii. 56-65 (1925)).

GENERALLY DISTRIBUTED.—*Pinus Strobus*.

GENERALLY DISTRIBUTED EXCEPT IN SOUTHEASTERN MASSACHUSETTS.—*Larix laricina*; *Picea mariana*.

NORTHERN.—A. *Abies balsamea*; *Picea canadensis*; *P. rubra*; *Pinus resinosa*; *Taxus canadensis*; *Thuja occidentalis*.

B. *Abies balsamea*, var. *phanerolepis*; *Pinus Banksiana*.

Although *Picea canadensis* and *Thuja occidentalis* reach their best development in calcareous regions, their ranges run so far beyond those typical of calcicolous species in New England that they seem best placed in this group. Along the Maine coast, *Picea canadensis* is abundant in many places on or near rocks which are far from basic in their composition. *Thuja* is occasional, but less abundant under such conditions.

Pinus Banksiana is a local species in New England. It is known from five stations on the coast of eastern Maine, from the Dead River valley, Lake Umbagog, Thornton, N. H. and the headlands of Lake Champlain—all, it will be noted, at comparatively low elevations. From the data at hand, *Abies balsamea*, var. *phanerolepis* appears to have a similar range, except as to altitude. It occurs at five stations in the central and eastern portions of the Maine coast, and locally, at high elevations, in the White and Green Mountains.

NEITHER NORTHERN MAINE NOR SOUTHEASTERN MASSACHUSETTS, RATHER GENERAL ELSEWHERE.—*Tsuga canadensis*. We have seen only one specimen of *Tsuga canadensis* from Maine north of the 45th parallel of latitude; reports, however, carry it north to about the 46th, both in the eastern and western parts of the state. Its range, therefore, somewhat overlaps the boundaries of the "northern Maine" area, as laid down in our fourth report.

SOUTHEASTERN MASSACHUSETTS AND RATHER GENERAL ELSEWHERE, BUT NOT NORTHERN MAINE.—*Juniperus communis*, var. *depressa*.

CHIEFLY THE THREE SOUTHERN STATES.—*Chamaecyparis thyoides*; *Juniperus virginiana*; *Pinus rigida*. *Pinus rigida* occurs northward at low altitudes in the Champlain, Connecticut, Androscoggin, and lower Kennebec valleys, is found in the sandy areas around Lake Ossipee, N. H., and extends along the Maine coast as far east as Mt. Desert Island. Its range is intermediate between typical ranges of this and the preceding group. *Juniperus virginiana* likewise follows the Champlain and Connecticut valleys northward, and the Maine coast eastward as far as the mouth of the Kennebec and Monhegan Island (*J. R. Churchill*). It is said by Dame and Brooks (*Trees of New England* 26 (1902)) to reach the middle Kennebec valley.

MISCELLANEOUS.—*Juniperus communis*; *J. horizontalis*. *Juniperus communis* occurs at scattered stations in southern New England and as far north as Gilead, Maine. It is not reported from Vermont. *J. horizontalis* is, except for a single station on the slopes of Mt. Equinox in Manchester, Vt. (*Mary A. Day*), confined to the immediate vicinity of the coast in Maine, New Hampshire, and extreme northeastern Massachusetts (Newbury). It is also reported from Templeton, Mass. (*Jackson, Cat. Pl. Worcester Co., Mass.* 10 (1909)), but this record is open to doubt and we have not been able to verify it.

C. A. WEATHERBY,
C. H. KNOWLTON,
R. C. BEAN.

HEDEOMA HISPIDA IN CONNECTICUT.

EDWIN H. EAMES.

By incidentally traversing one of the comparatively sterile, limestone tracts in Salisbury, Connecticut, a very interesting series of revelations was started. Such areas are attractive in many ways but their flora is limited since few species can endure such hardships.

In this particular place, a pasture with a few scattering red cedars as the only woody vegetation, several small colonies of *Hieracium florentinum* All.—which seems to be getting frequent in such situations—and a few other species usually confined to such soils, together with a sparse growth of grasses, were several colonies of *Hedeoma hispida* Pursh.

Although this species has been found at several other stations in